AMSAT News Service Weekly Bulletins
Issue: ANS-302
Date: 2017-10-28
Sources: amsat-ans-2017-ans-302-weekly-hyperkitty-35220b53bd.txt

---

AMSAT NEWS SERVICE
ANS-302

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* AMSAT-NA Announces GOLF CubeSat Program
* AMSAT-NA Board of Directors Elects Joe Spier, K6WAO, President
* Jordan’s first satellite – JY1-SAT
* APRS Satellites QIKCOM-1 Deployed
* FalconSat-3 Video w/ WiSP File Upload/Download
* Special Membership Offer for RadFxSat Launch
* Pope Asks Spacemen Life's Big Questions In ISS Live Chat
* AMSAT-NA Board of Directors Elects Joe Spier, K6WAO, President
* ARISS News
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-302.01
ANS-302 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 302.01
>From AMSAT HQ KENSINGTON, MD.
October 28, 2017
To All RADIO AMATEURS
BID: $ANS-302.01

AMSAT-NA Announces GOLF CubeSat Program

At the AMSAT-NA Annual General Meeting in Reno, NV, AMSAT-NA President Joe Spier, K6WAO, announced the next phase of AMSAT’s CubeSat program: GOLF. GOLF, an acronym for “Greater Orbit, Larger Footprint,” is a crucial step towards fulfilling AMSAT’s strategic goals involving high altitude, wide access satellite missions.

As an initial step in the GOLF program, the AMSAT-NA Board of Directors approved the submission of a NASA CubeSat Launch Initiative proposal for the GOLF-T satellite project. The GOLF-T project will serve as a rapidly deployable Low Earth Orbit (LEO) testbed for technologies necessary for a successful CubeSat mission to a wide variety of orbits, including LEO, Medium Earth Orbit (MEO), Geosynchronous Orbit (GEO), Highly Elliptical Orbit (HEO), or beyond.

AMSAT-NA Vice-President Engineering Jerry Buxton, N0JY, said “The GOLF-T project tees off the next phase of our CubeSat program. GOLF-T provides AMSAT hardware and knowledge for Attitude Determination and Control (ADAC) capability and the opportunity to develop a 3U spaceframe with deployable solar panels that can be used in LEO or HEO missions, two of the major systems required in future GOLF and HEO missions.”

In addition, GOLF-T provides the opportunity for rapid deployment and on orbit testing of the AMSAT’s Advanced Satellite Communications and Exploration of New Technology (ASCENT)program’s technology, including radiation tolerant transponder and Integrated Housekeeping Unit (IHU) technologies that will lead the way for low cost commercial off-the-shelf (COTS) systems that can function in the MEO and HEO radiation environments. GOLF-T will also provide for the development of “Five and Dime” Field-Programmable Gate Array Software Defined Radio (FPGA SDR) transponders for use on a variety of missions and orbits.

[ANS thanks the AMSAT-NA Board of Directors and our Engineering Team for the above information]

AMSAT-NA Board of Directors Elects Joe Spier, K6WAO, President

At it’s annual meeting, held at the Silver Legacy Resort Hotel in Reno, NV, the AMSAT-NA Board of Directors elected Joe Spier, K6WAO, of Reno, NV, President, succeeding Barry Baines, WD4ASW, who has retired after nine years of service as AMSAT’s President. Joe is a Life Member of AMSAT-NA and has previously served as Executive Vice President and Vice-President Educational Relations. He also has Life Memberships in the ARRL, SARA (Society of Amateur Radio Astronomers) and the AFA (Air Force Association). He holds an Extra Class license as well as commercial licenses.

Immediate Past President Barry Baines, WD4ASW, said “It has been an honor to serve as President for the past nine years and as a board member since 1999. I’m confident that the successes of the past nine years while serving as President will lead to new opportunities in AMSAT’s future as Joe assumes the helm working with the new Senior Leadership Team. I’m also thrilled that Paul Stoetzer, N8HM, and Clayton Coleman, W5PFG, are new voting members on the Board, including the assumption of my former slot. I’m excited that the new Board combined with the new Senior Leadership Team will bring insight, enthusiasm, energy and commitment to move AMSAT forward.”

Other officers elected by the Board were:

* Paul Stoetzer, N8HM, of Washington, DC, as Executive Vice President
* Jerry Buxton, N0JY, of Granbury, TX, as Vice-President Engineering
* Drew Glasbrenner, KO4MA, of New Port Richey, FL, as Vice-President Operations
* Clayton Coleman, W5PFG, of Granbury, TX, as Secretary
* Keith Baker, KB1SF/VA3KSF, of Corunna, ON, as Treasurer
* Martha Saragovitz of Silver Spring, MD, as Manager

[ANS thanks the AMSAT-NA Board of Directors for the above information]

Jordan’s first satellite – JY1-SAT

During the final satellite integration training for Jordan’s first satellite, JY1-SAT, the team was supported for the final stages of integration by His Royal Highness Crown Prince Al Hussein bin Abdullah II.

The spacecraft has been given to students of the Masar Initiative at the Jordan University of Science and Technology as part of the JY1-SAT mission support and training program under the Crown Prince Foundation given by ISIS – Innovative Solutions In Space and AMSAT-UK and AMSAT Netherlands.

The JY1-SAT mission was proposed by Jordanian students who participated in the first batch of the cooperation program with NASA, after which the interns had suggested the design and launch of the first Jordanian satellite CubeSat.

To build up the capability to design and develop such a first mission, the Crown Prince Foundation signed a support agreement with ISIS – Innovative Solutions In Space and the AMSAT Radio Amateur Societies of the UK and the Netherlands, for hardware and training support, building on ISIS’ and AMSAT’s experience with FUNcube radio amateur transponder missions.

As a special development for the JY1-SAT mission, AMSAT has expanded the capabilities of the FUNcube transponder to be able to transmit stored images reflecting the Jordanian culture and its historical heritage, along with a voice message recorded by the Crown Prince to be transmitted in space to receivers around the world.

The launch of the JY1-SAT, scheduled during the first half of next year, is in memory of His Majesty the late King Hussein, the first founder of the HAM Radio in Jordan and holder of call sign JY1.

JY1-SAT will have a linear, inverting, transponder downlinking between 145.855 & 145.875 MHz with the uplink between 435.100 & 435.120 MHz. The telemetry downlink will be on 145.840 MHz and be FUNcube compatible. A new Dashboard will be made available before the launch of JY1-SAT.

The Jordan Times – Crown Prince puts final touch on mini satellite project http://tinyurl.com/ANS302-JY1-Sat

[ANS thanks AMSAT-UK for the above information]

APRS Satellites QIKCOM-1 Deployed

QIKCOM-1 was deployed from the ISS Friday at 0915 UTC attached to the SIMPL spacecraft. It is an APRS digipeater just like the ISS. Whereas it also supports the same ARISS alias as the ISS digipeater, please use the ALIAS of APRSAT on your uplinks instead of ARISS so that you only hit QIKCOM-1 for these first few passes with your test uplinks (once a minute).. Or you can be specific via QIKCOM-1 callsign. At 4 Watts, it will be 10 dB stronger than PSAT(84) and about the same power level as ISS and should be easy to receive on the 145.825 downlink.

We ask all potential IGates to check your ground stations and make

sure they are ready to IGate packets during those initial orbits from all over the globe. If you do not have an IGate, just capture packets and email them to qikcom1 at gmail.com until we see that everything is making it to the APRS-IS.

The downlink should be available on the original http://pcsat.findu.com and also on http://59.167.159.165/satreporter/index2.html

Being released from ISS, QIKCOM-1 will of course have the same Elements and tracking info as ISS until they begin to separate. This means passes over the USA every 90 minutes beginning at 0630 EDT in the Southeast and ending after 1440 PDT in Southern California.

Web page: http://aprs.org/qikcom-1.html

As usual, QIKCOM-1 is not intended for UNATTENDED BEACONS. It is designed for Live Operations and experiments only.

For the initial passes, do not attempt 2-way contacts. Just set your STATUS text to indicate your TX power and antenna type and transmit at 1m intervals ATTENDED as described on the web page during these first few orbits. So we can get sttistices on uplink quality.

[ANS thanks Bob, WB4APR for the above information]

FalconSat-3 Video w/ WiSP File Upload/Download

If anyone would like to see how the WiSP software handles uploading & downloading files to FalconSat-3, I made a video of the highest elevation
pass tonight:

https://youtu.be/9spO1e8NVj0

... I don't understand it all yet, but am seeing some uploads & downloads.
I keep UISS open and ready in case anyone is active w/ APRS packets, but on this pass I didn't transmit from UISS to give the MSPE program from WiSP maximum time to work.

There's a little explanation in the notes below the video on YouTube if you click "SHOW MORE" on that page.

Drew Glasbrenner, KO4MA, has scanned and posted the chapter on WISP from Gould Smith's 2005 Digital Satellite & Telemetry Guide to the FalconSAT-3 page on amsat.org. He hopes it is helpful to everyone diving back into this excellent program from the past.

It can be found near the bottom of the page at https://www.amsat.org/falconsat-3/

[ANS thanks Scott, K4KDR and Drew KO4MA for the above information]

Special Membership Offer for RadFxSat Launch

As part of the preparations for the launch of RadFxSat on November 10th, AMSAT is making our “Getting Started With Amateur Satellites” book available for a limited time as a download with any paid new or renewal membership purchased via the AMSAT Store. This offer is only available with purchases completed online, and for only a limited time. A perennial favorite, Getting Started is updated every year with the latest amateur satellite information, and is the premier primer of satellite operation. The 182 page book is presented in PDF format, in full color, and covers all aspects of making your first contacts on a ham radio satellite.

Please take advantage of this offer today by visiting the AMSAT store at https://www.amsat.org/shop/ and selecting any membership option. While there, check out our other items, including the M2 LEOpack antenna system, Arrow antennas, AMSAT shirts, and other swag.

Thank you, and see you soon on RadFxSat!

[ANS thanks Paul N8HM for the above information]

Pope Asks Spacemen Life's Big Questions In ISS Live Chat

Pope Francis chatted with six astronauts at the International Space Station (ISS) on Thursday, kicking off the rare interview with a philosophical question on "man's place in the universe".

Italian Paolo Nespoli, 60, admitted that despite the bird's eye view of Earth he too remained "perplexed", while American Mark Vande Hei said seeing the planet from space made them "realise how fragile we are".

The Argentine pontiff sat at a Vatican desk, facing a wide-screen television on which the astronauts from America, Russia and Italy could be seen floating together in their blue suits.

"Good afternoon... or good evening. I imagine time passes differently at the space station, right?" the pope quipped.

"Astronomy makes us think about the universe's boundless horizons, and prompts questions such as 'where do we come from, where are we going?'" he mused.

A 30-second delay in the satellite feed gave Nespoli, Vande Hei, Americans Randolph (Randy) Bresnik and Joseph Acaba, and Russians Sergej Nikolaevic Rjazanskij and Alexandr Misirkin time to weigh up life's biggest questions.

"Our aim here is to spread knowledge, (but) the more we learn, the more we realise we do not know," admitted Nespoli, who is on his third trip into space.

"I would like people like you, theologians, philosophers, poets, writers, to come to space to explore what it means to be a human in space," he said, as Francis nodded and smiled.

US mission commander Bresnik told the Argentine that from the visible thinness of the planet's atmosphere shows how fragile life is on earth.

- 'Future of humanity' -

But the pope had not finished: what, he wanted to know, was their opinion of love as a force that moves the universe? What was their source of joy up in the space station, and how did a life without gravity change their view of the world?

The crew took it in turns to get their philosophical caps on, and not even a technical hitch which temporarily interrupted the interview, or the lack of a Russian translator, could throw the space travellers off course.

"I get the most joy by looking outside every day and seeing God's creation, maybe a little bit from his perspective," Bresnick said.

Far from wars, famines, pollution or human folly, he said "the future of humanity looks better from up here".

Bresnik, 50, a former Marine Corps aviator who goes by the nickname "Komrade", made his fifth career excursion outside the space station this month to carry out crucial repairs to the ISS's robotic arm with NASA colleague Acaba.

Acaba, 50, the first person of Puerto Rican heritage to become an astronaut, cheerfully said hello to the pope in Spanish before tackling the question on how the men deal with 'up' and 'down' losing their meaning in space.

Francis is not the only Roman Catholic leader to have put in a call to the star-covered heavens.

The first pope to get on the line to space was Benedict XVI in 2011, who rang the ISS -- which has been continuously occupied since 2000 -- when Nespoli was once again among the crew.

[ANS thanks Ella IDE via Space Daily for the above information]

ARISS News

+ A Successful contact was made between Istituto Scolastico Comprensivo “Nardi”, Porto San Giorgio, Italyand Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-21 09:31 UTC and lasted about nine and a half minutes. Contact was Direct/Telebridge via I6KZR and IQ5VR.HamTV was active.
  ARISS Mentor was Francesco IKØWGF.

+ A Successful contact was made between I.C. Michelangelo Buonarroti, Marina di Carrara, Italyand Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-21 09:31 UTC and lasted about nine and a half minutes. Contact was Direct/Telebridge via I6KZR and IQ5VR. HamTV was active.
  ARISS Mentor was Francesco IKØWGF.

+ A Successful contact was made between Istituto Comprensivo “Tauro Viterbo”, Castellana Grotte (Ba), Italy and Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-21 14:23 UTC and lasted about nine and a half minutes. Contact was Direct via IZ7RTN. HamTVC was active.
  ARISS Mentor was Francesco IKØWGF.
  Event location: Cittadella Mediterranea della Scienza, Bari, Italy

+ A Successful contact was made between “A.Gramsci-N.Pende”, Noicattaro, Italy and Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-21 14:23 UTC and lasted about nine and a half minutes. Contact was Direct via IZ7RTN.
ARISS Mentor was Francesco IKØWGF. HamTVC was active.
Event location: Cittadella Mediterranea della Scienza, Bari, Italy

+ A Successful contact was made between Chiddix Junior High School, Normal, IL, USA and Astronaut Joe Acaba KE5DAR using Callsign NA1SS. The contact began 2017-10-23 15:31 UTC and lasted about nine and a half minutes. Contact was Direct via W9AML
ARISS Mentor was Joe K6WAO.

+ A Successful contact was made between Beaconsfield State School, Mackay, Queensland, Australia and Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-26 08:23 UTC and lasted about nine and a half minutes. Contact was Telebridge via IK1SLD
ARISS Mentor was Shane VK4KHZ.

+ A Successful contact was made between Colegiul National Calistrat Hogas Piatra Neamt, Piatra Neamt, Romania and Astronaut Joe Acaba KE5DAR using Callsign OR4ISS. The contact began 2017-10-26 09:55 UTC and lasted about nine and a half minutes. Contact was Telebridge via EI1ISS.
ARISS Mentor was Armand SP3QFE.

+ A Successful contact was made between Glanmire Community College, Cork, Ireland and Astronaut Joe Acaba KE5DAR using Callsign OR4ISS. The contact began 2017-10-26 09:55 UTC and lasted about nine and a half minutes. Contact was Direct via EI1ISS.
ARISS Mentor was Seamus EI8BP.

+ A Successful contact was made between Istituto Tecnico Tecnologico “Enzo Ferrari”, Borgo A Mozzano, Italy and Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-28 08:13:31 UTC. Contact was Direct via IQ5LU and IQ1SM.
ARISS Mentor was Francesco IKØWGF.

+ A Successful contact was made between Liceo Statale “G. D. Cassini”, Sanremo, Italy and Astronaut Paolo Nespoli IZØJPA using Callsign IRØISS. The contact began 2017-10-28 08:13:31 UTC. Contact was Direct via IQ5LU and IQ1SM.
ARISS Mentor was Gianpietro IZ2GOJ.

Upcoming ARISS Contact Schedule

+ Primaria e Secondaria di primo grado Istituto comprensivo Via XVI settembre, Civitavecchia, Italy direct via IKØWGF
The ISS callsign is presently scheduled to be IRØISS
The scheduled astronaut is Paolo Nespoli IZØJPA
Contact is a go for: Mon 2017-10-30 11:20:34 UTC
Watch for HamTV to be operative.

+ Asociación Civil Instituto Maria Montessori, San Cristóbel, Venezuela, direct via YY2CMR
The ISS callsign is presently scheduled to be NA1SS
The scheduled astronaut is Joe Acaba KE5DAR
Contact is a go for: Tue 2017-10-31 18:23:28 UTC

+ Liceo Scientifico ‘Francesco Cecioni”, Livorno, Italy and Liceo Artistico Melotti, Lomazzo, Italy, direct via IQ5LI.
The ISS callsign is presently scheduled to be IRØISS

  The scheduled astronaut is Paolo Nespoli IZØJPA
  Contact is a go for: Fri 2017-11-03 09:27:26 UTC
  Watch for HamTV to be operative.

+ Istituto di Istruzione Superiore “Leonardo Da Vinci”, Lanusei,
  Italy, direct via ISØBWM
  The ISS callsign is presently scheduled to be OR4ISS
  The scheduled astronaut is Paolo Nespoli IZØJPA
  Contact is a go for: Sat 2017-11-04 10:12:16 UTC
  Watch for HamTV to be operative.

[ANS thanks ARISS, Charlie AJ9N and David AA4KN for the above
 information]

Satellite Shorts From All Over

+ Daylight saving time 2017 in the United Kingdom ends at 02:00 on
  Sunday, 29 October

  [ANS thanks Southgate ARN for the above information.]

+ Curious about when Daylight Savings time begins and ends around
  the world? Thank goodness for UTC.
  Visit https://www.timeanddate.com/time/dst/2017.html

  [ANS thanks EMike AA8EM for the above information]

+ RUSSIAN WAR GAMES SPARK 'BLUE AURORAS'
  Around the Arctic Circle, people see green auroras almost every
  night. It's nothing to write home about. Blue auroras, on the other
  hand, are very unusual.

  Photos and more information are highlighted on
  Spaceweather.com.

  [ANS thanks Spaceweather.com via Southgate ARN for the above
   information

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive addi-
tional benefits. Application forms are available from the AMSAT
Office.

Primary and secondary school students are eligible for membership
at one-half the standard yearly rate. Post-secondary school students
enrolled in at least half time status shall be eligible for the stu-
dent rate for a maximum of 6 post-secondary years in this status.
Contact Martha at the AMSAT Office for additional student membership
information.

73,
This week's ANS Editor,
EMike McCardel, AA8EM

aa8em at amsat dot org